

## Technical Data Sheet

### iF488 Anti-Human CD64

**Catalog Number:** 109305, 109306  
**Size:** 25 tests, 100 tests  
**Target Name:** CD64, FCGR1A, FCG1, FCGR1, IGFR1  
**Regulatory Status:** RUO

#### Product Details

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**Clone:** H22  
**Application:** FC  
**Reactivity:** Human  
**Format:** iF488  
**Isotype:** Mouse IgG1  
**Antibody Type:** Monoclonal  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA  
**Protein Concentration:** Supplied at a lot-specific concentration.  
**Storage&Handling:** The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.  
**Recommended Usage:** For flow cytometric staining, it is recommended to use 5 uL of this reagent per 0.5-1.0 million cells in a 100 µL volume. Optimal reagent performance should be determined by titration for each specific application.  
**Excitation Laser:** Blue Laser (488 nm)

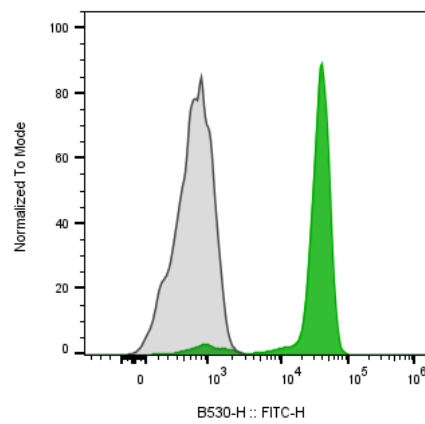
#### Background Information

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CD64, also known as FcγRI or FcR I, is a 72 kDa type I glycoprotein and a member of the immunoglobulin superfamily. This high-affinity IgG Fc receptor is predominantly expressed on monocytes, macrophages, dendritic cells, and activated granulocytes. Its expression can be upregulated by IFN-γ stimulation, enhancing its role in immune responses. CD64 binds IgG immune complexes and is involved in several crucial immune functions, including antigen capture, phagocytosis of IgG/antigen complexes, and antibody-dependent cellular cytotoxicity (ADCC). By mediating these processes, CD64 contributes to the activation of innate immune responses and the clearance of immune complexes.

#### Product Data

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Human peripheral blood monocytes stained either with iF488 Anti-Human CD64 clone H22 (color-filled histogram) or an isotype control (gray histogram).